

## ENVIRONMENTAL ASSESSMENT RECORD

1. **NUMBER** CO-110-2004-005-EA
2. **CASEFILE/PROJECT NUMBER:** COC67280
3. **PROJECT NAME:** Water Disposal Well
4. **LEGAL DESCRIPTION:** Sixth Principal Meridian, Colorado  
T. 1 N., R. 100 W.,  
Sec. 17, lot 4.
5. **APPLICANT:** GeoMet Operating Company, Inc.
6. **NEED FOR PROPOSED ACTION:** GeoMet has three gas wells that are producing water and they have requested to re-enter an existing well to use as a water disposal well.
7. **DESCRIPTION OF PROPOSED ACTION:**
  - a. **Proposed Action:** The proposed action is for the re-entry of the East Rangely Fed 1-17 well for the purposes of use it as a water disposal well. The original well was plugged and abandoned in 1982, with final abandonment approved in 1988. GeoMet picked this location due to the fact that the casing is still intact and re-entry will be easier than drilling a new well. The term will be for 30 years. Access is via County Road 131. The pad will be 180 by 175 feet encompassing 0.72 acres.
  - b. **No Action Alternative:** Geomet would not use the Fed 1-17 well for water disposal.
8. **PLAN CONFORMANCE REVIEW:**
  - a. **Name of Plan:** White River Record of Decision and Approved Resource Management Plan (ROD/RMP).
  - b. **Date Approved:** July 1, 1997
  - c. **Page/Decision:** Pages 2-24 thru 2-52 "To make public lands available for the siting of public and private facilities through the issuance of applicable land use authorizations, in a manner that provides for reasonable protection of other resource values."
  - d. The proposed action has been reviewed for conformance with this plan (43 CFR 1610.5, BLM 1617.3) The action conforms to the decisions/pages of the plan listed above.
9. **RELATIONSHIP TO OTHER NEP**

**+A DOCUMENTS:** This environmental assessment is tiered to, and incorporates by reference the White River Resource Area Resource Management Plan (PRMP) and Final Environmental Impact Statement (FEIS) approved May 29, 1996.

# **10. AFFECTED ENVIRONMENT/ENVIRONMENTAL IMPACTS/MITIGATION MEASURES:**

## **CRITICAL ELEMENTS**

An X in the “Not Affected” column in the table below indicates that the critical element has been analyzed and will not be affected by the proposed action or the no action alternative. Affected elements are addressed in the paragraphs following the table.

<b>Not Affected</b>	<b>Critical Element</b>	<b>Specialist Signature</b>	<b>Date</b>
	Air Quality		
	Cultural Resources		
<b>X</b>	Floodplains, Wetlands, Riparian Zones, and Alluvial Valleys	Glenn Klingler	11-18-03
	Native American Concerns		
	Prime and Unique Farmlands		
<b>X</b>	Threatened and Endangered Animals	Glenn Klingler	11-18-03
<b>X</b>	Threatened and Endangered Plants	T. Meagley	11-13-03
<b>X</b>	Wastes, Hazardous or Solid	M. O’Mara	11-17-03
	Water quality, Surface or Ground		
<b>X</b>	Wilderness Area, Wild and Scenic Rivers	Chris Ham	11/17/03
<b>X</b>	Areas of Critical Environmental Concern	T. Meagley	11-13-03
	Environmental Justice		
	Invasive, Non-Native Species/Reclamation		
	Noxious Weeds		

## **AIR QUALITY:**

***Affected Environment:*** There are no special designation air sheds or non-attainment areas nearby that would be affected by the proposed action

***Impact of Proposed Action:*** The proposed action would result in short term, local impacts to air quality during and after construction, due to dust being blown into the air. However, airborne particulate matter should not exceed Colorado air quality standards on an hourly or daily basis. Following successful seeding of the sites, airborne particulate matter should return to near pre-construction levels

***Impact of No Action Alternative:*** None

***Mitigative Measures:*** None

***Signature of specialist:*** CHollowed 11/14/03

## **CULTURAL RESOURCES:**

***Affected Environment:*** The proposed water injection well location has been inventoried at the Class III (100% pedestrian) level for the old Natomas 1-17 well location (Powers Elevation 1981, Compliance Dated 5/1/1981) with no cultural resources identified in the inventoried area.

***Impact of Proposed Action:*** If mitigative measures are followed there will be no impacts to cultural resources.

***Impact of No Action Alternative:*** There would be no impacts to cultural resources under the No Action Alternative.

***Mitigative Measures:*** All construction must be confined to the location of the reclaimed well pad.

***Signature of specialist:*** Michael Selle 11/14/2003

## **WATER QUALITY, SURFACE OR GROUND:** (This includes all information related to Public Land Health Standard 5.)

***Affected Environment:*** The proposed injection well is in Spring Creek, which is tributary to the White. A review of the Colorado's 1989 Nonpoint Source Assessment Report (plus updates), the 305(b) report, the 303(d) list and the Unified Watershed Assessment was one to see if any water quality concerns have been identified. The State has classified this segment as a "Use Protected" reach. It's designated beneficial uses are: Warm Aquatic Life 2, Recreation 2, and Agriculture. The antidegradation review requirements in the

Antidegradation Rule, are not applicable to waters designated use-protected. For those waters, only the protection specified in each reach will apply. For this reach, minimum standards for three parameters have been listed. These parameters are: dissolved oxygen = 5.0 mg/l, pH = 6.5 - 9.0 and Fecal Coliform = 2000/100ml and 630/100 ml E. coli. In addition standards for inorganic and metals have also been listed and can be found in the table of stream classifications and water quality standards. This segment retained its Recreation Class 2 designation after sufficient evidence was received that a Recreation Class 1a use was unattainable.

***Impact of Proposed Action:*** Quite frequently, groundwater associated with Coal bed Methane wells is of good quality. Methods of disposal include reinjection, evaporation pits, approved commercial facilities, road spreading and discharge to state waters. All of these methods require a permit from the Colorado Oil and Gas Commission and are bound by the water quality standards set by the state Department of Public Health and environment's Water Quality Control Division.

***Impact of No Action Alternative:*** Water disposal would still need to be addressed even if the proposed action were not permitted.

***Mitigative Measures:*** None

***Signature of specialist:*** CHollowed 11/14/03

**INVASIVE, NON-NATIVE SPECIES/RECLAMATION:** (This includes vegetation information related to Public Land Health Standard 3.)

***Affected Environment:*** Project is located on an existing well pad that may or may not have been reclaimed. The project area is in the bottom of Spring Creek, which has a sagebrush/greasewood/western wheatgrass vegetation type. Soils are deep and well suited to reclamation. The bottom vegetation is subject to livestock grazing which must be accounted for in the seed mix.

***Impact of Proposed Action:*** The proposed seed mix contains non-native species which have been found to outperform native species. These species have not been found to move off-site or to interbreed with adjacent native species. Over time the adjacent native community would dominate the site. This is expected to take between 10 and 30 years. These non-native species are also grazing tolerant.

***Impact of No Action Alternative:*** There would be no impacts.

***Mitigation Measures:*** Apply the following Conditions of Approval from the White River ROD/RMP, Appendix B:

180. All disturbed sites shall be promptly reclaimed to the satisfaction of the Area Manager.

181. Reclamation should be implemented concurrent with construction and site operations to the fullest extent possible. Final reclamation actions shall be initiated within six months of the termination of operations unless otherwise approved in writing by the Authorized Officer.

182. The goal for rehabilitation of any disturbed area shall be the permanent restoration of original site conditions and productive capability.

183. Disturbed areas shall be restored as nearly as possible to its original contour.

184. Fill material shall be pushed into cut areas and up over backslopes. Leave no depressions that will trap water or form ponds.

185. Distribute topsoil evenly over the location and prepare a seedbed by disking or ripping. Drill seed on contour at a depth no greater than 1/2 inch.

***Signature of specialist:*** R. Fowler                      11-14-03

**NOXIOUS WEEDS:** (This includes vegetation information related to Public Land Health Standard 3.)

***Affected Environment:*** There are no known noxious weed problems in the project area.

***Impact of Proposed Action:*** There is the opportunity for introduction of noxious weed species by construction and support vehicles. If weed control is completed in a prompt manner there would be no impacts to the adjacent plant communities.

***Impact of No Action Alternative:*** There would be no impacts.

***Mitigation Measures:*** Apply Condition of Approval #179 from the White River ROD/RMP: Application of herbicides must be under field supervision of an EPA-certified pesticide applicator. Herbicides must be registered by the EPA and application proposals must be approved by the BLM.

***Signature of specialist:*** Robert Fowler                      11-14-03

## NON-CRITICAL ELEMENTS

An X in the “Not Affected” column in the table below indicates that the non-critical element has been analyzed and will not be affected by the proposed action or the no action alternative. Affected elements are addressed in the paragraphs following the table.

Not Affected	Non-Critical Element	Specialist Signature	Date
X	Access and Transportation	Scott Pavey	11/12/03
X	Forest Management	R. Fowler	11-14-03
X	Geology and Minerals	Paul Daggett	11/17/2003
X	Hydrology and Water Rights	CHollowed	11/14/03
X	Land Status/Realty Authorizations	Penny Brown	10/21/03
X	Fire Management	K. Holsinger	10/29/03
	Paleontology		
X	Rangeland Management	R. Fowler	11-14-03
	Recreation		
X	Soils (see Reclamation above)	CHollowed	11/14/03
	Visual Resources		
X	Wildlife Aquatic	Glenn Klingler	11-18-03
	Wildlife Terrestrial		
X	Wild Horses	Valerie Dobrich	11/19/03

## PALEONTOLOGY:

***Affected Environment:*** The project appears to be located entirely within the quaternary alluvial bottoms of Spring Creek. Quaternary alluviums are not generally expected to produce scientifically important fossil data.

***Impact of Proposed Action:*** With mitigation below, there would be no new impacts to fossil resources under the proposed action.

***Impact of No Action Alternative:*** There would be no impacts for fossil resources under the No Action Alternative.

***Mitigative Measures:*** If paleontological materials (fossils) are uncovered during project activities, the operator is to immediately stop activities that might further disturb such materials, and contact the authorized officer (AO). The operator and the authorized officer will consult and determine the best option for avoiding or mitigating paleontological site damage.

***Signature of specialist:*** Michael Selle 11/14/2003

## **RECREATION:**

***Affected Environment:*** The proposed action occurs within the White River Extensive Recreation Management Area (ERMA). BLM custodially manages the ERMA to provide for unstructured recreation activities such as hunting, dispersed camping, hiking, horseback riding, wildlife viewing and off-highway vehicle use.

***Impact of Proposed Action:*** The public will lose approximately one acre of dispersed recreation potential while well is in operation. The public will most likely not recreate in the vicinity of these facilities and will be dispersed elsewhere.

***Impact of No Action Alternative:*** No loss of dispersed recreation potential and no impact to hunting recreationists.

***Mitigative Measures:*** None.

***Signature of specialist:*** Chris Ham 11/17/03

## **VISUAL RESOURCES:**

***Affected Environment:*** This injection well is in an area classified as VRM Class 3. VRM Class 3 management allows for development as long as the development does not dominate the new landscape.

***Impact of Proposed Action:*** The drill pad will be on an old disturbance that will comply with the guidelines for VRM Class 3 with mitigation as listed below.

***Impact of No Action Alternative:*** No impacts.

***Mitigative Measures:*** Production facilities shall be painted Desert Brown (Munsell Color Chart 10 YR 6/3) or equivalent, to match the surroundings. Areas not needed for production shall be reclaimed in a timely manner.

***Signature of specialist:*** Max McCoy 11-17-03

## **WILDLIFE TERRESTRIAL:**

***Affected Environment:*** Vegetation on the existing pad is sparse and consists of rabbit brush, greasewood, very young sagebrush and various grasses. The pad elevation is 5986 feet. Surrounding terrain consists of rimrock and multi-aged stands of pinyon-juniper, most of which is potential nesting habitat for woodland and cliff nesting raptors. The access road to this pad location traverses several miles of Severe Winter Range for mule deer.

***Impact of Proposed Action:*** The proposed location generally involves habitat holding moderate potential for nesting raptors. Daily and/or increased use of access roads through Severe Winter Range would add physical stress to mule deer populations within the project area.

***Impact of No Action Alternative:*** Failure to construct this well with accompanying road use would reduce the disturbance to wintering mule deer as well as potential raptor nest sites.

***Mitigative Measures:*** Due to the action occurring within Severe Winter Range, the BLM will prohibit surface disturbing/development/completion activities of this project from January 1 through April 30 to avoid disturbance to wintering mule deer. This condition of approval is in effect, but may be waved at the discretion of the BLM White River Field Manager. It is the responsibility of GeoMet, Inc. to contact the BLM White River Field Office (970-878-3800) to inquire as to whether a waiver may be obtained.

A current raptor survey must be conducted by BLM biologists prior to any surface disturbing activities commencing after April 30. It is the responsibility of GeoMet, Inc. to contact the BLM White River Field Office (970-878-3800) after April 30 to schedule a current survey.

***Signature of specialist:*** Glenn Klingler 11-18-03

**CUMULATIVE IMPACTS:** This action is consistent with the scope of impacts addressed in the White River ROD/RMP. The cumulative impacts of oil and gas activities are addressed in the White River ROD/RMP for each resource value that would be affected by the proposed action.

***Signature of specialist:*** Penny Brown 10/21/03

## **11. PERSONS/AGENCIES CONSULTED: BLM Resource Specialists**



## **FINDING OF NO SIGNIFICANT IMPACT (FONSI)/DECISION RECORD**

**FONSI:** The environmental assessment, analyzing the environmental effects of the proposed action, has been reviewed. The approved mitigation measures (listed below) result in a finding of no significant impact on the human environment. Therefore, an environmental impact statement is not necessary to further analyze the environmental effects of the proposed action.

**DECISION AND RATIONALE:** It is my decision to approve the re-entry of Fed Well #1-17 and allow the applicant to use it for disposal of water as described in the proposed action with the mitigation measures listed below. Note that these mitigation measures specify that no surface disturbing/development/completion activities may take place from December 1 through April 30 to avoid disturbance to wintering mule deer.

### **MITIGATION MEASURES:**

1. All construction must be confined to the location of the reclaimed well pad.
2. All disturbed sites shall be promptly reclaimed to the satisfaction of the Area Manager.
3. Reclamation should be implemented concurrent with construction and site operations to the fullest extent possible. Final reclamation actions shall be initiated within six months of the termination of operations unless otherwise approved in writing by the Authorized Officer.
4. The goal for rehabilitation of any disturbed area shall be the permanent restoration of original site conditions and productive capability.
5. Disturbed areas shall be restored as nearly as possible to its original contour.
6. Fill material shall be pushed into cut areas and up over backslopes. Leave no depressions that will trap water or form ponds.
7. Distribute topsoil evenly over the location and prepare a seedbed by disking or ripping. Drill seed on contour at a depth no greater than 1/2 inch.
8. Application of herbicides must be under field supervision of an EPA-certified pesticide applicator. Herbicides must be registered by the EPA and application proposals must be approved by the BLM.
9. If paleontological materials (fossils) are uncovered during project activities, the operator is to immediately stop activities that might further disturb such materials, and contact the authorized officer (AO). The operator and the authorized officer will consult and determine the best option for avoiding or mitigating paleontological site damage.

10. Production facilities shall be painted Desert Brown (Munsell Color Chart 10 YR 6/3) or equivalent, to match the surroundings. Areas not needed for production shall be reclaimed in a timely manner.

11. Due to the action occurring within Severe Winter Range, the BLM will prohibit surface disturbing/development/completion activities of this project from January 1 through April 30 to avoid disturbance to wintering mule deer. This condition of approval is in effect, but may be waved at the discretion of the BLM White River Field Manager. It is the responsibility of GeoMet, Inc. to contact the BLM White River Field Office (970-878-3800) to inquire as to whether a waiver may be obtained.

12. A current raptor survey must be conducted by BLM biologists prior to any surface disturbing activities commencing after April 30. It is the responsibility of GeoMet, Inc. to contact the BLM White River Field Office (970-878-3800) after April 30 to schedule a current survey.

**REMARKS:** This action will be authorized under Title V of the Federal Land Policy and Management Act of October 21, 1976 (90 Stat. 2776; 43 U.S.C. 1761).

**COMPLIANCE PLAN:** Compliance will be conducted every five years by the realty staff.

**SIGNATURE OF PREPARER:** Penny Brown

**DATE SIGNED:** 11/19/03

**SIGNATURE OF ENVIRONMENTAL COORDINATOR:** Scott Perry

**DATE SIGNED:** 11/19/03

**SIGNATURE OF AUTHORIZED OFFICIAL:** J. K. G.

**DATE SIGNED:** 11/19/03

**ATTACHMENTS:** Map of the Location of the Proposed Action



# Location of Proposed Action CO-WRFO-2004-005-EA

